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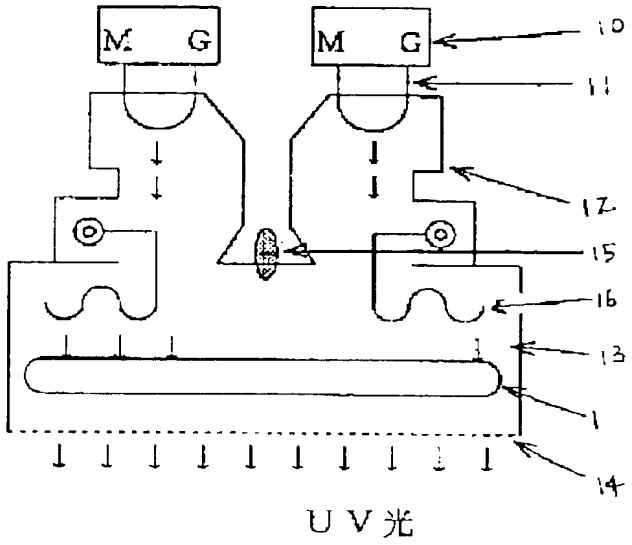
TITLE : NO-ELECTRODE DISCHARGE LAMP



ABSTRACT : PROBLEM TO BE SOLVED: To effectively radiate a desired ultraviolet ray from a luminescent tube by sealing a specified quantity of mercury, rare gas, cadmium or the like in a rod-shaped luminescent tube, irradiating the tube with a microwave from an outside, and make emitting cadmium or the like.

SOLUTION: In a rod-shaped no-electrode discharge lamp 1 (2.0 to 25.0mm in inner diameter and the length is twice as large as the inner diameter), mercury of 1.0 to 6.0mg/cc, inert rare gas (argon gas or the like) as a rare gas, and one or more types of cadmium, zinc, and bismuth each of 0.01 to 2.0mg/cc are sealed. A microwave emitted from a magnetron 10 is introduced and radiated to this lamp 1 via an antenna 11, a wave guide tube 12, and a microwave cavity 13. Thus, the microwave is well absorbed into cadmium, zinc, and bismuth, and a desired ultraviolet ray is effectively radiated from the lamp 1.